

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/496,249	02/02/2000	William A. Horwarth	CM-0002	5923	
23532	7590 01/24/2003				
CINCINNATI MACHINE, A UNOVA COMPANY			EXAMINER		
4701 MARBU MAIL STOP A	ACM	REIS, TRAVIS M			
CINCINNATI	, OH 43209		ART UNIT	PAPER NUMBER	
			2859		
			DATE MAILED: 01/24/2003	,	

Please find below and/or attached an Office communication concerning this application or proceeding.

				<i>K</i>
,	-	Applica	tion No.	Applicant(s)
,	Offic Astism Commen	09/496,	249	HORWARTH ET AL.
	Offic Action Summary	Examin	er	Art Unit
		Travis M		2859
Period fo	The MAILING DATE of this commun or Reply	ication appears on t	ne cover sheet with the	correspondence addr ss
THE I - Exter after - If the - If NO - Failu - Any r	ORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNI maisons of time may be available under the provisions SIX (6) MONTHS from the mailing date of this common period for reply specified above is less than thirty (3) period for reply is specified above, the maximum starte to reply within the set or extended period for reply reply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b).	ICATION. of 37 CFR 1.136(a). In no enunication. io) days, a reply within the statutory period will apply and will, by statute, cause the ac	vent, however, may a reply be atutory minimum of thirty (30) d will expire SIX (6) MONTHS fro	timely filed days will be considered timely. om the mailing date of this communication.
	Depressive to communication (a) El			
1)	Responsive to communication(s) file			
2a)☐		2b)⊠ This action i		
3) <u> </u>	Since this application is in condition closed in accordance with the pract on of Claims	i for allowance exce tice under <i>Ex parte</i> (pt for formal matters, Q <i>uayle</i> , 1935 C.D. 11,	prosecution as to the merits is , 453 O.G. 213.
4)🛛	Claim(s) 1-20 is/are pending in the a	application.		
	4a) Of the above claim(s) <u>17-20</u> is/are	e withdrawn from co	nsideration.	
5)🖂	Claim(s) <u>9-16</u> is/are allowed.			
6)⊠	Claim(s) <u>1-3</u> is/are rejected.			
7)🖂	Claim(s) <u>4-8</u> is/are objected to.			
	Claim(s) <u>17-20</u> are subject to restrict on Papers	tion and/or election r	equirement.	
9)⊠ ⊺	The specification is objected to by the	Examiner.		
10)⊠ Т	The drawing(s) filed on <u>02 February 2</u>	<u>2000</u> is/are: a) <u> </u> acc	epted or b) objected	to by the Examiner.
	Applicant may not request that any obje			
11)[] T	The proposed drawing correction filed			
	If approved, corrected drawings are req	quired in reply to this C	ffice action.	
12) 🗌 T	The oath or declaration is objected to	by the Examiner.		
Priority u	nder 35 U.S.C. §§ 119 and 120			
13)	Acknowledgment is made of a claim	for foreign priority u	nder 35 U.S.C. § 119((a)-(d) or (f).
a)[☐ All b)☐ Some * c)☐ None of:			
	1. Certified copies of the priority of	documents have bee	en received.	
	2. Certified copies of the priority of	documents have bee	en received in Applica	tion No
	 Copies of the certified copies of application from the Internate the attached detailed Office action 	ational Bureau (PCT	Rule 17.2(a)).	_
14) 🗌 A	cknowledgment is made of a claim fo	or domestic priority u	nder 35 U.S.C. § 119	(e) (to a provisional application).
a)	☐ The translation of the foreign lang cknowledgment is made of a claim for	guage provisional a _l	oplication has been re	eceived.
\ttachment(
2) D Notice 3) D Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PT nation Disclosure Statement(s) (PTO-1449) Pa	ГО-948) per No(s) <u>8</u> .		ry (PTO-413) Paper No(s) I Patent Application (PTO-152)
Patent and Tra O-326 (Rev		Office Action Summa	irv	Part of Paper No. 10

Art Unit: 2859

of a plurality of devices.

DETAILED ACTION

Page 2

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - Claims 1-16, drawn to a machine tool monitoring fixture, classified in class
 33, subclass 502.
 - II. Claims 17-20, drawn to tool positioning, classified in class 702, subclass95.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because it is possible to monitor the condition of a trunnion axis of a CNC machine using a spindle mounted probe without

the specifics of 1st, 2nd, & 3rd blocks mounted on the outer surface of a wall at angular

positions along an arc. The subcombination has separate utility such as the calibration

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Application/Control Number: 09/496,249 Page 3

Art Unit: 2859

2. Claims 17-20 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 4.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 130. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities: On page 9, line 31, "2" should be ---1---.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Haggar (U.S. Patent 3089248).

Art Unit: 2859

Haggar discloses a machine tool comprising a body (10) 1st, 2nd, & 3rd blocks (22, 24, 26, 28) mounted on said body (10) at 1st, 2nd, & 3rd angular positions respectively about an arc circumscribed by a radius about an axis of rotation, and said blocks having co-planer flat surfaces each with normals parallel to said axis of rotation, said body comprising parallel first (34) and second walls (X, see Attachment) and a third wall (Y, see Attachment) disposed normal too, and connected to said first and second walls, wherein said blocks are mounted on said first wall (Figure 1).

Allowable Subject Matter

- 7. Claims 4-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 8. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not disclose or clearly suggest a machine tool wherein said first and second walls include recesses in each wall, in combination with the remaining limitations in the claims.
- 9. Claims 9-16 are allowed.
- 10. The following is an examiner's statement of reasons for allowance:

With reference to claims 9-16, the prior art of record does not disclose or clearly suggest a monitoring system for monitoring alignment of a spindle trunnion axis comprising a probe to measure locations of features on a machine tool monitoring feature control means for moving said spindle mounted probe and 1st, 2nd, & 3rd, blocks mounted on said body at 1st, 2nd, & 3rd, angular positions respectively along an arc

Art Unit: 2859

circumscribed by a radius about an axis of rotation, in combination with the remaining limitations in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Malhiot discloses a testing apparatus (U.S. Patent 2367513). Adamczyk discloses a measuring apparatus (U.S. Patent 3599339). Davis discloses devices for securing workpieces for matching operations (U.S. Patent 3600813). Nordmann et al. discloses a measuring machine (U.S. Patent 3750295). Maxey discloses a three axis precision measuring device (U.S. Patent 3940854). McMurtry discloses a method and apparatus for use in co-ordinate measuring machines (U.S. Patent 4168576). Coleman et al. discloses a coordinate locating device (U.S. Patent 4261107). Herzog discloses a method of calibrating probe pins on multicoordinate measurement machines (U.S. Patent 4523450). Allard et al. discloses an orthopaedic gauge (U.S. Patent 5309648). Wiedmann et al. discloses a coordinate measuring apparatus having a spatially adjustable probe pin (U.S. Patent 5848477). Yoda et al. discloses a workform-measuring method and device and CMM (U.S. Patent Application Publication 2002/0000047A1).

Application/Control Number: 09/496,249

Art Unit: 2859

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis M Reis whose telephone number is (703) 305-

4771. The examiner can normally be reached on 8:00--5:00 Monday--Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (703) 308-3875. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Travis M Reis Examiner Art Unit 2859

tmr January 17, 2003 Diego Gutierrez

Muntate

Page 6

Supervisory Patent Examiner **Technology Center 2800**